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(71) Applicant (*for all designated States except US*): ANVIL MEDICAL, INC. [US/US]; 2330 Washington Street, Newton, Massachusetts 02462 (US).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): DAVIS, H., Richard [US/US]; 10471 NW 2nd Street, Coral Springs, Florida 33071 (US). KAPLAN, Aaron, V. [US/US]; 225 Douglas Road, Norwich, Vermont 05055 (US).

(74) Agent: ALTMAN, Daniel, E.; Knobbe, Martens, Olson & Bear, LLP, 2040 Main Street, Fourteenth Floor, Irvine, California 92614 (US).

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(54) Title: STEPPED BALLOON CATHETER FOR TREATING VASCULAR BIFURCATIONS

(57) Abstract: A stepped balloon catheter prosthesis deployment system is disclosed for placement of a prosthesis across an Os opening from a main body lumen to a branch body lumen. The prosthesis comprises a radially expandable support at one end, a circumferentially extending link at the other end and at least one frond extending axially therebetween. The prosthesis is configured to be deployed from a stepped diameter balloon with the support in the branch body lumen, with the circumferentially extending link in the main lumen and the frond extendable across the Os.